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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/743,694	12/22/2003	James P. Kleckner	P01091US2A	7802
7590	03/08/2006			
Michael R. Huber Bridgestone Americas Holding, Inc. 1200 Firestone Parkway Akron, OH 44317			EXAMINER MAKI, STEVEN D	
			ART UNIT 1733	PAPER NUMBER

DATE MAILED: 03/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/743,694

Applicant(s)

KLECKNER, JAMES P.

Examiner

Steven D. Maki

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 December 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9,11-16 and 18-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 9,11-16 and 18-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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1) Applicant is advised that should claims 11, 12 and 13 be found allowable, claims 19, 21 and 22 respectively will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

2) The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Japan 325

4) **Claims 9, 11-13, 15-16, 18-22, 24 and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Japan 325 (JP 2001-63325).**

Japan 325 discloses a tire having a tread 1, belt 2, carcass 4, bead wires 5, bead part 8, side tread 3, recess 8a and transponder 7 having receiver and transmitter functions wherein transponder ("tag") is disposed in the recess 8a ("cavity"). See translation and figure 1. The distance A between the center of the transponder 7 and the rim flange is up to 100 mm (3.93 inches). See page 9 of translation and figure 6.

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As can be seen from figure 1, recess 8a is shown as having "an opening at the outer surface of the sidewall". It is noted that Japan 325 describes holding the transponder "by the side tread rubber [sidewall rubber]". See page 8 of translation.

Claim 9 is anticipated by Japan 325's tire. The claimed cavity reads on the recess 8a. The claimed tag reads on the transponder. The claimed bead portion reads on the portion including bead wire 5. The description of "at the outer surface of the sidewall" fails to require a location different from that disclosed by Japan 325. It is emphasized that the center of Japan 325's transponder may be 100 mm (3.9 inches) above the rim flange. With respect to "the encapsulation material adhering to the sidewall to secure the tag to the sidewall", the epoxy material disclosed by Japan 325 inherently adheres to the rubber.

As to claims 10, 11-13, Japan 325 teaches coating the transponder with epoxy resin. See for example page 13 of translation. The claimed encapsulation material reads on the epoxy resin.

As to claims 15-16, see location of transponder / recess shown in figure 6 and described on page 9 of the translation.

As to claim 18, see enlargement of the recess and cavity shown in figure 1.

As to claims 19-22, 24 and 25, note above comments on claims 9, 11-13, 15, 16 and 18.

Japan 325 with Adamson et al (filed 6-11-02, available under 102(e))

5) Claims 9, 11-16 and 18-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japan 325 in view of Adamson et al (WO 03/105509,

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filed 6-11-02).

Japan 325 is considered to anticipate claim 9. In any event: It would have been obvious to one of ordinary skill in the art to encapsulate Japan 325's tag for a tire with encapsulation material as claimed such that the encapsulation material adheres to the sidewall to secure the tag to the sidewall in view of Adamson et al's suggestion to surround a "tag" for a tire comprising an antenna 20 and a radio device 11 with an insulation coating 22, which has good adherence with the rubber material of the tire, to allow for very high frequency or higher radio transmission from the antenna to thereby improve the read range of the "tag". With respect to the claimed tag location, see figures 1 and 6 of Japan 325. With respect to the claimed specific encapsulation material, see page 6 of Adamson et al. As to claim 26, Adamson et al suggest a "tag" comprising a central body with wires extending from both sides of the central body. See figure 1.

Japan 325 with Lee et al / Spitz et al / Rensel

6) Claims 9, 11-16 and 18-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japan 325 in view of at least one of Lee et al (US 5731754), Spitz et al (EP 694861) and Rensel (EP 1049196) and optionally in view of Bohm (EP 249918).

Japan 325 is considered to anticipate claim 9. In any event: It would have been obvious to one of ordinary skill in the art to encapsulate Japan 325's tag for a tire with encapsulation material as claimed such that the encapsulation material adheres to the sidewall to secure the tag to the sidewall in view of:

(1) the suggestion from at least one of Lee et al, Spitz et al and Rensel et al to encapsulate a tag for a tire in order to protect the tag wherein

(a) Lee et al suggests disposing a transponder for a tire in encapsulating medium 7 such as rubber (a flexible material) for compatibility with a vehicle tire (col. 2 lines 45-65),

(b) Spitz et al suggests disposing a transponder for a tire in a container 2 comprising rubber or high elastic plastic to protect the transponder from the outside particularly against mechanical effect (see machine translation), and

(c) Rensel et al suggests encapsulating components of a device for transmitting information with rigid epoxy resin to provide protection for the components of the device (col. 5 lines 30-37)

and optionally

(2) Bohm teaches curing a tire such that a precured applique on the sidewall thereof bonds to the rubber material of the tire.

The encapsulation material adhering to the sidewall naturally flows from Japan 325's teaching to cure the sidewall rubber adjacent to the transponder. When using an encapsulation material such as rubber, one of ordinary skill in the art would readily expect such adherence to take place in view of Bohm et al's teaching that a precured rubber applique bonds to sidewall rubber when curing the sidewall rubber. None of the pending claims require the tag to be held only by adhesion. None of the claims require the steps of forming a cured tire having a cavity and then placing the transponder in the cavity and adhering the transponder to the sidewall rubber. It is also noted that claims 9

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and 19 fail to exclude "adhering" using an adhesive such as adhesive 5 disclosed by Spitz et al.

As to the claimed location of the transponder, see figures 1 and 6 of Japan 325. As to the specific encapsulation material, Lee et al suggests using rubber (flexible material), Spitz et al suggests using elastic rubber / plastic and Rensel et al suggests epoxy. As to claim 26, Rensel et al suggest a "tag" comprising a central body with wires extending from both sides of the central body. See figure 3.

Remarks

7) Applicant's arguments filed 12-27-05 have been fully considered but they are not persuasive.

Applicant argues and the examiner agrees that Japan 325's transponder is exposed to the heat of the vulcanization process. However, the pending claims are directed to a tire instead of a process. The pending claims fails to exclude obtaining the claimed adherence during vulcanization in a mold.

Applicant argues that the claimed invention allows the monitoring device to be securely connected to the tire without exposing the monitoring device to the heat used to vulcanize the tire. This argument is not commensurate in scope with the claims and is therefore not persuasive since none of the claims require the step of adhering the tag to the tire after vulcanizing the tire.

Applicant argues that Japan 325 does not disclose the use of an encapsulation material that secures the transponder to the sidewall. In response, examiner notes that

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(1) Japan 325 teaches epoxy resin - the same encapsulating material recited in claims 13 and 22 and (2) Japan 325 cures the sidewall rubber adjacent to the transponder.

Applicant argues and examiner agrees that Japan 325 uses a mechanical interconnection of elements formed during the tire cure process. However, adherence of Japan 325's transponder (e.g. epoxy coated) to the sidewall rubber is inherent. In any event, note the new ground of rejection. Also, none of the pending claims exclude connecting by adhering and mechanically securing.

8) No claim is allowed.

9) Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


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10) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven D. Maki whose telephone number is (571) 272-1221. The examiner can normally be reached on Mon. - Fri. 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571) 272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Steven D. Maki
March 4, 2006


STEVEN D. MAKI 3-4-06
PRIMARY EXAMINER